

Title (en)

Method and apparatus for flexible frame processing and classification engine

Title (de)

Verfahren und Vorrichtung für ein flexibles Rahmenverarbeitungs und Klassifikationssystem

Title (fr)

Procédé et appareil de traitement flexible de trames et système de classification

Publication

EP 1336915 A1 20030820 (EN)

Application

EP 03003743 A 20030219

Priority

US 7636702 A 20020219

Abstract (en)

A method of handling data packets in a network device and an apparatus for handling data packets in a network device are disclosed. The method includes receiving an incoming data packet and the incoming data packet is parsed to obtain a portion of the incoming data packet. That portion is compared with rules stored in a rule table (100), where each rule (101,102,103) specifies a set of actions. A match between the portion and a particular rule (101,102,103) of the rules is selected and a particular set of actions (111,112,113), specified by that particular rule (101,102,103) is executed. Each rule (101,102,103) includes a mask, a selection flag and a validity check that are used in the comparison of the portion with each rule. The rules may be compared with the packet portion serially or in a parallel fashion and if more than one rule (101,102,103) matches the portion, the highest priority is selected as the matching rule. <IMAGE>

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CPC (source: EP US)

H04L 69/22 (2013.01 - EP US)

Citation (search report)

- [XA] WO 0060793 A2 20001012 - NETSCREEN TECHNOLOGIES INC [US], et al
- [A] EP 0743777 A2 19961120 - SUN MICROSYSTEMS INC [US]
- [A] EP 0658837 A2 19950621 - CHECKPOINT SOFTWARE TECHN LTD [IL]
- [XA] RUSTY RUSSELL: "packet-filtering-HOWTO", LINUX 2.4, 20 November 2001 (2001-11-20), pages 1 - 19, XP002237039, Retrieved from the Internet <URL:<http://cvs.netfilter.org/~checkout~/netfilter/documentation/HOWTO/packet-filtering-HOWTO.sgml?rev=1.22&content-type=text/plain>> [retrieved on 20030402]
- [A] FABRICE MARIE: "NETFILTER-EXTENSIONS-HOWTO", LINUX 2.4, 20 December 2001 (2001-12-20), pages 1 - 21, XP002237040, Retrieved from the Internet <URL:<http://cvs.netfilter.org/~checkout~/netfilter/documentation/HOWTO/netfilter-extensions-HOWTO.sgml?rev=1.5&content-type=text/plain>> [retrieved on 20030402]

Cited by

EP2056535A3; EP2077000A4; CN102055670A; EP1657864A3; ES2222083A1; EA008987B1; GB2502455A; CN103415836A; GB2502455B; US10015104B2; US8522316B2; US8219712B2; WO2005104453A1; WO2004100464A1; WO2012080170A1; WO2008049270A1; US8761015B2; US9729436B2; US10397103B2; US8854996B2; US8867395B2

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